

CARTRIDGE FOR ANALYZING A FLUID SAMPLE

ABSTRACT OF THE DISCLOSURE

A cartridge for analyzing a fluid sample has a body
5 defining at least first and second channels and a cavity
separating the channels. An end of the first channel is
positioned on a first side of the cavity, and an end of the
second channel is positioned on a second side of the
cavity. The cavity is defined by a first curved surface
10 positioned adjacent the end of the first channel, a second
curved surface positioned adjacent the end of the second
channel, and at least a third surface between the first and
second curved surfaces. The cartridge also comprises an
elastic membrane for establishing a seal with the first and
15 second curved surfaces to prevent the flow of fluid between
the channels. The third surface is recessed from the first
and second surfaces to provide a gap between the membrane
and the third surface when the membrane is pressed against
the first and second surfaces. A cartridge having a conical
20 valve seat is also disclosed.